ABSTRACT

The present invention relates to a peptide for the specific recognition of lipid vectors.

The peptide of the invention comprises the peptide sequence (I; SEQ ID NO: 15) below:

$$J^{1}-J^{2}-J^{3}-J^{4}-J^{5}-J^{6}-Z^{7}-U^{8}-J^{9}-J^{10}-U^{11}-Arg-J^{13}-J^{14}-U^{15}-Lys-Gly-X^{18}-Gly-Thr-J^{21}-Glu-J^{23}-J^{24}-U^{25}-J^{26}-J^{27}-J^{28}-U^{29}-J^{30}-J^{31}-Arg-J^{33}-J^{34}-J^{35}-J^{36}-B^{37}-J^{38}-J^{39}-U^{40}-J^{41}-J^{42}-J^{43}-U^{44}-J^{45}-J^{46}-J^{47}-J^{48}-J^{49}-Arg-J^{51}-U^{52}-J^{53}-J^{54}-Asp-U^{56}-Lys-Ser-Z^{59}-Leu-J^{61}-J^{62}-J^{63}-J^{64}-Z^{65}-J^{66}-J^{67}-U^{68}-J^{69}-J^{70}-J^{71}-U^{72}-J^{73}-J^{74}-J^{75} \qquad (I)$$

in which the amino acids J are chosen, independently of one another, from essential amino acids, or derivatives thereof, such that at least 50% of them are polar residues chosen from Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Lys, Orn, Pro, Ser, Thr and Tyr; the amino acids U are chosen, independently of one another, from Ala, Cys, Gly, Ile, Leu, Met, Phe, Trp, Tyr and Val; the amino acid X¹⁸ is chosen, independently of the other amino acids of the sequence, from Ala, Asn, Cys, Gln, Gly, His, Ile, Leu, Met, Phe, Ser, Thr, Trp, Tyr and Val; the amino acid B³⁷ is chosen, independently of the other amino acids of the sequence, from Arg, Ala, Cys, Gly, Ile, Leu, Met, Phe, Trp, Tyr and Val; the amino acid Z⁷ is chosen, independently of the other amino acids of the sequence, from Asp and Gly; the amino acids Z⁵⁹ and Z⁶⁵ are chosen from Glu, Asp, Lys or Arg; and the superscripts of the residues J, Z, U, X and B represent the position of these amino acids in said sequence.